

REMARKS

Claims 1-3 and 5-22 are pending. Claims 4 and 23 are canceled, and the remaining claims have been amended.

The specification has been amended to correct an inadvertent translation error of the international patent application No. PCT/JP2004/010740 at page 13, line 14, which corresponds to the specification of the present application at page 20, line 17, where “chiisakunatte” in Japanese, means “are small” in English.

Claim 1 has been amended to incorporate features of claims 2 and 23. Moreover, the claims have been amended to clarify the subject matter as a flame retardant polyester artificial hair, with editorial revisions. Further, an inadvertent error of the number of potential bromine substitutions of the benzene ring in formulas (6) and (7) has been amended to “0-4” based on a number of the other substituents in the benzene ring, i.e., 6 carbons minus 2 substituted positions.

Claim 2 has been objected to because of informalities. Claim 2 has been amended to remove formula (1), which is incorporated into claim 1, and this objection is moot and should be withdrawn. Amended claim 1 also sets forth that m represents 30 to 150, as supported by examples of brominated epoxy flame retardant set forth in the specification.

Claims 6-23 were objected to under 37 CFR 1.75(c) as being in an improper multiple dependent form. It is believed that the present amendment overcomes the objection.

Claims 2, 4, and 5 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Favorable reconsideration is requested in view of the amendments made herein.

Claim 4 has been canceled. The limitation of formula (1) of claim 2 has been incorporated into claim 1. Claim 5 has been amended to include the limitations with respect to R¹ and y in formulas (6) and (7).

Claims 1 and 3 were provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 3 of copending Application No.11/345952. The present amendments render this rejection moot.

Claims 2, 4, and 5 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 4, 5, and 7-22 of copending Application No. 11/345952. Applicants plan to file a terminal disclaimer over the 11/345952 Application. Accordingly, this rejection will become moot upon filing of the terminal disclaimer.

Claims 2, 4, and 5 were provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of copending Application No.11/345952. This rejection has been rendered moot by the amendments made herein.

Claims 1-5 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 6 of copending Application No. 10/579994, which was issued as U.S. Patent No. 7,501,463 on March 10, 2009. This rejection has been rendered moot by the present amendment.

Claims 1-5 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, and 4 of copending Application No. 10/592393. This rejection has also been rendered moot by the present amendment.

Claims 1, 3, and 4 were rejected under 35 U.S.C. 102(b) as being anticipated by Iizaka et al. (Japanese Patent Application Publication No. 60-71713). Applicants respectfully traverse this rejection.

Iizaka fails to disclose a compound in which "m" is 30-150 as claim 1 requires.

Claims 1 and 3-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Akisuke OKU et al. (Japanese Patent Application Publication No. 62-170519). Applicants respectfully traverse this rejection.

The thickness of the artificial hair of the present application is 30-80 dtex. However, fibers of examples 1-3 of Oku have thickness of 2d (ca. 2.2 dtex), 3d (ca. 3.3 dtex), and 6d (ca. 6.7 dtex), respectively (see page 121 (5) at right lower coln., 3-4 lines from the bottom, page 122 (6), left lower coln., lines 5-6, and page 123 (7), right upper

coln., lines 2-3, respectively). The fibers of Oku are much thinner because Oku is directed to fiber for clothing. Accordingly Oku does not teach or suggest the presently claimed invention.

Claims 1-3 and 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (International Patent Application Publication No. WO 03/008679, herein U.S. Patent No. 7,332,563 is used as an English translation) in view of Hochberg et al. (U.S. Patent No. 4,732,921). Applicants respectfully traverse this rejection.

Masuda discloses a polyester fiber including a flame retardant, preferably a phosphorus based flame retardant (see coln. 14, lines 17-20 of US 7,332,563 and citations of Masuda hereinafter are the same). Masuda merely suggests to include a further flame retardant other than the phosphorus based flame retardant among other potential additives such as a heat-resistant material, a light stabilizer, a fluorescent agent, an antioxidant, an antistatic agent, a pigment, a plasticizer and a lubricant (see coln. 23, lines 9-15), and does not disclose or suggest any particular flame retardant other than that the flame retardant is different from the phosphorus based one, nor a concentration of the added flame retardant. Thus, Masuda fails to disclose the presence of 5 to 30 parts by weight of a brominated epoxy flame retardant (B) in the composition as claim 1 requires.

Hochberg discloses a flame-resistant polybutylene terephthalate (PBT) molding resin composition, which improves fatigue strength (see abstract and coln. 4, lines 10-18). One of ordinary skill in the art would never consider combining the teachings of Hochberg with Masuda. Thus, there is no reasonable basis to combine the PBT flame retardant for molding resin with a fiber of Masuda to obtain the artificial hair of the presently claimed invention.

Claims 1 and 3-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (International Patent Application Publication No. WO 03/008679, herein U.S. Patent No. 7,332,563 is used as an English translation) in view of Kishida et al. (U.S. Patent No. 4,562,216). Applicants respectfully traverse this rejection.

This rejection relies on Kishida's disclosure of a flame retardant resin composition including formula (I) and an inorganic compound (see coln. 7, lines 9-12). The flame retardant system that Kishida discloses is a glass fiber (abstract) and is not

pertinent to the subject matter of claim 1, which is an artificial hair. Even if the flame retardant system of Kishida were combined with the fiber of Masuda, which Applicants do not concede, "l" of formula (I) of Kishida is 11 or less (see coln. 4, lines 51-59), Kishida clearly teaches that the flame retardant having more than this level of polymerization is undesirable because it contributes to deterioration of resin properties (*id*). Thus, Kishida fails to disclose a flame retardant polyester artificial hair that includes brominated epoxy flame retardant (B) having "m" of 30-150 as claim 1 requires.

For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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Attachment: Petition for Extension of Time